

REMARKS/ARGUMENTS

Claims 18, 20, 21, 23-34, and 36-38 are pending in the application. Claim 18 is amended. Claims 1-17, 19, 22, and 35 were canceled without prejudice.

Claim 18 is the independent claims. Reexamination and reconsideration of the application are respectfully requested.

INTERVIEW SUMMARY

A telephone interview was conducted between the Examiner and applicant's representative, Terry Tsai, on April 1, 2010. Applicant thanks the Examiner for the courtesy of the interview.

In the telephone interview, applicant discussed that claim 18 reciting "a shape of the first engaging structure and a shape of the second engaging structure are in an asymmetrical relationship with reference to a center line of the lateral surface member." Applicant stated that the "asymmetrical relationship" is in reference to a center line between the first and second engaging structures and parallel with the first and second lateral ends, as shown in FIG. 3b. And the cited FIG. 5 of Yamazaki (U.S. Patent 6,136,091) does not show such asymmetrical relationship.

The Examiner agreed with our position, but **required amending claim 18 to further define "a center line."** Specifically, the Examiner suggested adding to claim 18 the limitation "wherein the center line is between the first and second engaging structures and parallel with the first and second lateral ends."

Claim 18 is amended per the Examiner's suggestion. The substantive issues discussed in the interview are incorporated in the instant response.

Claim Rejections - 35 U.S.C. § 103

Claims 18, 20-21, 23, 28-34, and 36-38 stand rejected under 35 U.S.C 103(a) as unpatentable over Sakaguchi (JP 10-182285) in view of Yamazaki (U.S. Patent 6,136,091). Claims 24-27 stand rejected under 35 U.S.C. 103(a) as unpatentable over Sakaguchi in view of Yamazaki, and further in view of Lovejoy (U.S. Patent 3,905,740).

Amended claim 18 recites:

A mold, comprising:
a bottom surface member; and
a plurality of lateral surface members combining
with the bottom surface member,
and each lateral surface member comprising a first
engaging structure on a first lateral end thereof and a
second engaging structure on a second lateral end thereof,
one of the first and second engaging structures of one of
the plurality of lateral surface members engages with one
of the first and second engaging structures of another one
of the plurality of lateral surface members,
wherein the first and second engaging structures
each comprises a projection and a recess, and a shape of
the first engaging structure and a shape of the second
engaging structure are in an asymmetrical relationship
with reference to a center line of the lateral surface
member in a plan view thereof,
wherein the center line is between the first and
second engaging structures and parallel with the first and
second lateral ends.

The cited art does not teach or suggest at least the limitations “a shape of the first engaging structure and a shape of the second engaging structure are in an asymmetrical relationship with reference to a center line of the lateral surface member in a plan view thereof,” and “wherein the center line is between the first and second engaging structures and parallel with the first and second lateral ends.”

Concerning Sakaguchi, it teaches a mold formed by combining a bottom surface member and a plurality of lateral surface members (drawing 1). However, the Action at page 4 acknowledges that Sakaguchi does not even teach or suggest the required projections and recesses. And therefore, Sakaguchi does not teach or suggest the "first and second engaging structures each comprises a projection and a recess," and that "the a shape of the first engaging structure and a shape of the second engaging structure are in an asymmetrical relationship with reference to a center line."

Yamazaki is directed at a silicon semiconductor material charged in a double-structured crucible of an outer crucible and an inner crucible. The crucible is heated from the upper side thereof by the heat radiated from a heating member energized by an induction heating coil, so that the silicon raw semiconductor material is melted (Abstract). Yamazaki is cited for the projections and recesses illustrated in FIGS. 4 and 5. However, as shown in those figures, Yamazaki does not teach or suggest the limitations "a shape of the second engaging structure are in an asymmetrical relationship with reference to a center line of the lateral surface member in a plan view thereof" and "wherein the center line is between the first and second engaging structures and parallel with the first and second lateral ends," as recited in amended claim 18. And as discussed in the INTERVIEW SUMMARY section, the Examiner agrees that Yamazaki does not teach or suggest those required limitations.

Accordingly, the combination of Sakaguchi and Yamazaki would not teach or suggest the limitation of claim 18 discussed above.

Likewise, combining Lovejoy with Sakaguchi and Yamazaki would not obtain the required limitations. Lovejoy is generally directed at an injection mold for making a polygonal plastic article, and the mold includes having a closed bottom and an open top. A first mold section corresponds to the exterior dimensions of the

bottom wall and a portion of the contiguous side walls of the article. A second mold section makes up elements that defines the interior surface of the article. Side wall elements are movable relative to both of the mold sections from an open position spaced from both sections to a closed position. The side wall members interlock with both mold sections to form the mold enclosure. Linkage elements interconnect the mold elements to provide a coordinated movement. (Abstract). Lovejoy, however, does not teach or suggest that each lateral surface members having engaging structures, which includes a projection and a recess. Thus, Lovejoy does not teach or suggest that engaging structures are asymmetrical with respect to a center line of the lateral surface member.

The advantages flowing from the limitations of claim 18 are not seen or discernable in the cited art. For example, FIGS. 1 and 2 illustrate a case where the engaging structures are symmetrical, similar to Yamazaki. In this case, the lateral surface member 3a having the recess 6 is easily moved in a direction indicated by an arrow P both inward and outward, because its upper part is not regulated by the other lateral surface member 3b in a joining portion between the projection 5 and the recess 6 (applicant specification at page 24, paragraph 49). FIGS. 3(a) and 3(b) illustrate an exemplary embodiment of claim 1. In this case, when the lateral surface member 3c tries to curve inward, the movement is regulated by the adjacent lateral surface member 3c. Thus, the projection 5 and the recess 6 are provided at both ends of the lateral surface member 3c having an asymmetrical relationship so that the assembled mold 1 is firmly fixed without warping and deflection of the lateral surface member 3c (applicant specification at page 27, paragraphs 58 and 59).

For the above reasons, the 103(a) rejections of claim 18 and claims 20, 21, 23-34, and 36-38, which depend from claim 18, should be withdrawn.

Appl. No. 10/597,514
Amdt. Dated May 6, 2010
Reply to Office Action of January 6, 2010

Attorney Docket No. 81872.0124
Customer No. 26021

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4600 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,

HOGAN LOVELLS US L.L.P.

Date: May 6, 2010

By: 

Lawrence J. McClure
Registration No. 44,228
Attorney for Applicant(s)

1999 Avenue of the Stars, Suite 1400
Los Angeles, California 90067
Phone: 310-785-4600
Fax: 310-785-4601